AMENDMENT

In the Claims:

Please amend the claims as follows:

1. (Currently amended) A method for profiling and solving space mission problems, the method comprising:

creating a space mission analysis scenario;

setting up a control sequence that simulates a problem to be solved in the space mission;

selecting control variables to be checked in solving the problem;

identifying parameters to be used in defining desired results that represent an adequate solution to the problem;

establishing profiles for each particular sub-problem of the problem to be solved by:

specifying which of the previously selected control variables should be varied for each particular sub-problem, and

specifying what results should be achieved for each particular sub-problem; and

running simulations for each of the established profiles to provide a result representing a solution to the problem to be solved.

2. (Original) The method of claim 1, wherein the step of running simulations for each of the established profiles comprises:

after each profile is run, collecting the solution to that profile, and, in the event that there is a subsequent profile to be run, applying it as the initial starting point for a subsequent profile; and

collecting the solution to the last profile and providing it as the result representing a solution to the problem to be solved.

3. (Canceled)

4. (Currently amended) A computer system adapted to perform profiling and solving space mission problems for which a space mission analysis scenario has been created, the system comprising:

a processor;

a memory, addressable by the processor, including software instructions adapted to enable the computer system to perform the steps of:

setting up a control sequence that simulates a problem to be solved in the space mission;

selecting control variables to be checked in solving the problem;

identifying parameters to be used in defining desired results that represents an adequate solution to the problem;

establishing profiles for each particular sub-problem of the problem to be solved by:

specifying which of the previously selected control variables should be varied for each particular sub-problem, and

specifying what results should be achieved for each particular sub-problem; and

running simulations for each of the established profiles to provide a result representing a solution to the problem to be solved.

5. (Original) The computer system of claim 4, wherein the step of running simulations for each of the established profiles comprises:

after each profile is run, collecting the solution to that profile, and, in the event that there is a subsequent profile to be run, applying it as the initial starting point for a subsequent profile; and

collecting the solution to the last profile and providing it as the result representing a solution to the problem to be solved.

6. (Canceled)

7. (Currently amended) A computer program product for enabling a computer to perform profiling and solving space mission problems for which a space mission analysis scenario has been created, the computer program product comprising:

software instructions for enabling the computer to perform predetermined operations, and

a computer readable medium embodying the software instructions;

the predetermined operations including the steps of:

setting up a control sequence that simulates a problem to be solved in the space mission;

selecting control variables to be checked in solving the problem;

identifying parameters to be used in defining desired results that represents an adequate solution to the problem;

establishing profiles for each particular sub-problem of the problem to be solved by:

specifying which of the previously selected control variables should be varied for each particular sub-problem, and

specifying what results should be achieved for each particular sub-problem; and

running simulations for each of the established profiles to provide a result representing a solution to the problem to be solved.

8. (Original) The computer program product of claim 7, wherein the step of running simulations for each of the established profiles comprises:

after each profile is run, collecting the solution to that profile, and, in the event that there is a subsequent profile to be run, applying it as the initial starting point for a subsequent profile; and

collecting the solution to the last profile and providing it as the result representing a solution to the problem to be solved.

9. (Canceled)